# Water Resources, Joint Legislative Task Force Update on The City of Sumner's Pilot Project

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# The City of Sumner's Pilot Project

Water System Plans in 2004 and 2009 identified the need for additional domestic water production.

The City built a deep aquifer well as the most sustainable and environmentally responsible approach to address this need.



#### ESSB 6091 Part 3: Mitigation Sequence

- (a) Avoiding impacts by: (i) Complying with mitigation required by adopted rules that set forth minimum flows, levels, or closures; or (ii) making the water diversion or withdrawal subject to the applicable minimum flows or levels; or
- White River is closed to new diversions.
- Puyallup River's minimum flows are established by rule.
- Impacts from deep aquifer wells, although muted, are dispersed over time and distance.

#### ESSB 6091 Part 3: Mitigation Sequence

(b) Where avoidance of impacts is *not reasonably attainable*, minimizing impacts by **providing permanent new or existing trust water rights** or through other types of replacement water supply resulting in no net annual increase in the quantity of water diverted or withdrawn from the stream or surface water body and no net detrimental impacts to fish and related aquatic resources; or

#### **Available Mitigation Water**

- Seasonal Irrigation Rights Held in Trust
   Available May through September
- Cascade Water Alliance's Regional Reserved Water
   Available Year-round but subject to Minimum River Flows

#### Potential Mitigation Water (under negotiation; grant funds awarded)

Cascade Water Alliance's Tail Race Water
 Available year-round, subject to periodic maintenance

Mitigation water has variable geographic coverage in White River; None of the Mitigation Water would affect the Puyallup River above the confluence with the White River.

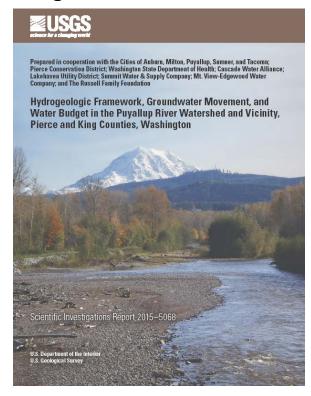
### ESSB 6091 Part 3: Mitigation Sequence

(c) Where avoidance and minimization are *not reasonably attainable*, compensating for impacts by providing *net ecological benefits* to fish and related aquatic resources in the water resources inventory area through in-kind or out-of-kind mitigation or a combination thereof, that improves the function and productivity of affected fish populations and related aquatic habitat. ...





- 1. Pursuing water acquisition opportunities.
  - Tailrace water acquisition for wetland augmentation and flow mitigation.
  - Awarded Streamflow Restoration Grant Funding
- 2. Awaiting the USGS's South East Sound Hydrogeological Model
  - Anticipated in 2020
  - Needed to Quantify Estimated Impacts to surface waters



3. Continuing development of the White River Restoration Project



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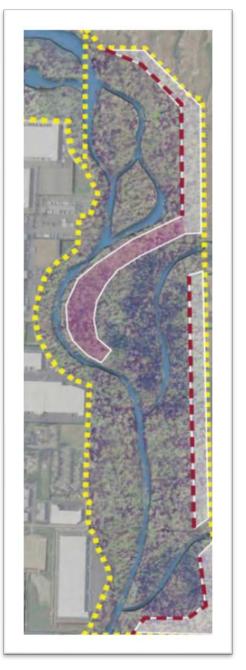
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- Continuing development of the White River Restoration Project
  - Two Indian Tribes
  - Two Cities
  - Pierce County
  - Union Pacific Railroad
  - Cascade Water Alliance
  - Puget Sound Energy
  - Private Property Acquisition
  - Sewer and Water Utility Relocation
  - Commercial Land Developer
- 4. Assessment of Net Ecological Benefits

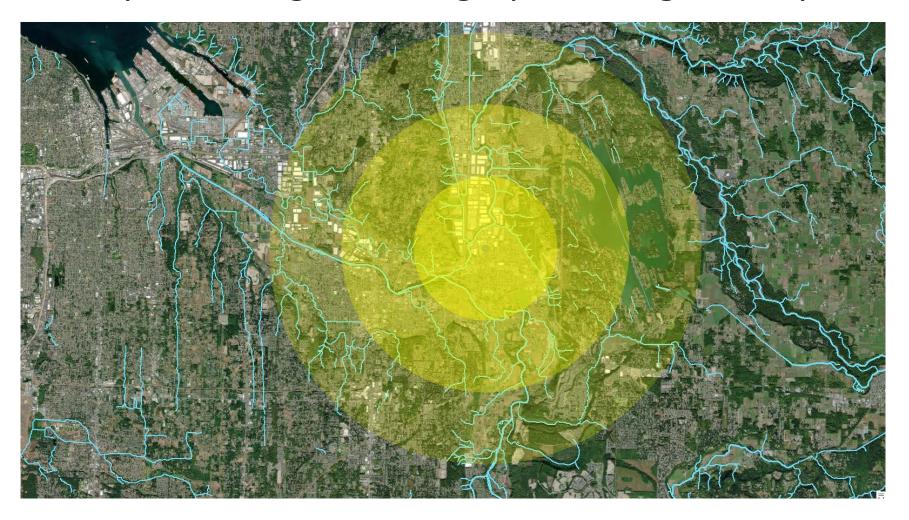
Targeting to complete a mitigation package submittal to Ecology in late 2020.



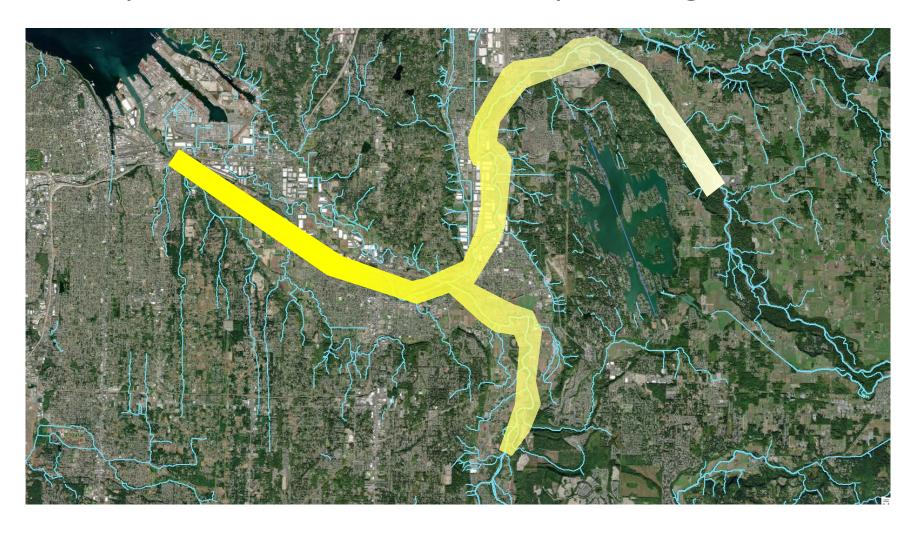
# Net Ecological Benefit

- Taking a collaborative approach with stakeholders, most notably the Muckleshoot Indian Tribe and Puyallup Tribe of Indians
  - Dialogue Group
  - Series of meetings, including focused meeting with only tribes

# Conceptual Image of Geographic Range of Impacts

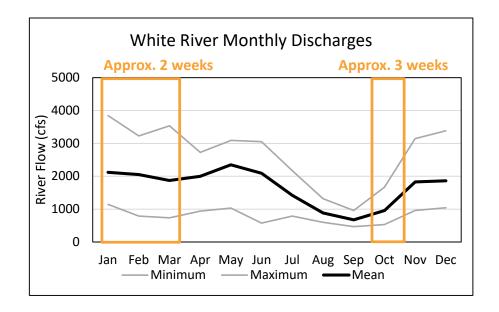


# Flow Depletions Increase Additively Moving Downstream



# **Out-of-Kind Mitigation Need**

- Flow depletion of up to 1.5 cfs
- Tributaries and in the Puyallup River upstream of confluence with White River
- In-kind mitigation is generally not available during 5 weeks out of the year (3 weeks in October, 2 weeks between January and March)



# Principles Being Applied in Developing Framework

- Meet requirements in Ecology's Final NEB Guidance
- Clear and transparent approach to document how the mitigation benefits offset the mitigation need
  - Include quantitative elements, but not require excessive scrutiny of many inputs
- Focus on crediting key habitat improvements in mitigation
  - adding high quality off-channel habitat is highly beneficial and appropriate type of mitigation to include in out-of-kind mitigation to offset water withdrawals

# Updated Net Ecological Benefit Approach

- Assign relative habitat functional value to habitat types
  - E.g., mainstem, tributary, floodplain
  - Score range 0 (no value) to 1 (full value)
- Calculate acreages of each habitat type in mitigation project and impact area
  - Existing conditions
  - Proposed condition (water withdrawal and mitigation)
- If Proposed > Existing, then Net Ecological Benefit achieved

# Example NEB Table

Habitat Type	Habitat Quality	A	В	С	Existing Score (A x B)	Proposed Score (A x C)
		Habitat Value 1.0=optimal 0.0=no value	Existing Acreage	Proposed Acreage		
Main channel	high					
	low					
Off-channel	high					
	low					
< <others>&gt;</others>						
< <others>&gt;</others>						
< <others>&gt;</others>						
TOTAL					Sum of Existing Scores	Sum of Proposed Scores

If Proposed > Existing, then Net Ecological Benefit achieved